

## Hand-Held 2.0/2.9 GHz RF Signal Strength Analyzer

- Hand-Held and battery operated
- 100kHz to 2900MHz measurement range (2060MHz for 3201)
- 125 Ch/sec scan rate (12.5 Ch/sec for 3201)
- Built-in 2.9GHz frequency counter (2GHz for 3201)
- High sensitivity (-117 dBm max)
- Detects Wide band and Narrow band FM, AM and Single Sideband Signals
- Phase lock loop for precise frequency tuning
- RS-232 interface
- Up to 160 channels may be scanned and displayed
- Audio output with built-in speaker
- Detachable antenna included
- Back-lit display
- All functions are menu selected
- Instrument setups & display data may be stored in memory
- Includes software and RS-232 Cable
- Hard copy printer output of spectrum and bar graph displays
- Ideal for IEEE 802.11 applications, Cellular Telephones, RF paging systems, Indoor repeaters, Surveillance applications

**3290**

### SPECIFICATIONS ■

#### Frequency

Frequency Range (3201): 100kHz to 2060MHz

Frequency Range (3290): 100kHz to 2900MHz

Frequency Step: 5kHz to 9995kHz in multiples of 5kHz or 6.25kHz

Ref. Oscillator Accuracy: ±3 PPM

Frequency Marker Accuracy: ±25 PPM

Frequency Measurements: Narrow Band FM, Wide Band FM, AM and Single side band

#### Input

Input Impedance: 50Ω

Maximum Input Volts: 5V RMS (+270dBm)

Measurement Units: dBmV, dBμV, dBm

Attenuation: 0dB or -10dB internal; 0dB to 60dB with external Attenuator

#### Narrow Band FM

Level Measurement Range (3201):

-117dBm to -67dBm (1MHz to 2060MHz)

Level Measurement Range (3290):

-117dBm to -67dBm (300MHz to 1800MHz)

-107dBm to -67dBm (1MHz to 300MHz and 1800MHz to 2900MHz)

Resolution: ±0.5dB; Accuracy: ±3dB

Bandwidth: 12.5kHz

#### Wide Band FM, AM & SSB

Level Measurement Range (3201):

-108dBm to -58dBm (10MHz to 2060MHz)

Level Measurement Range (3290):

-107dBm to -57dBm (300MHz to 1800MHz)

-97dBm to -57dBm (10MHz to 300MHz and 1800MHz to 2900MHz)

Resolution: ±0.5dB; Accuracy: ±3dB

Bandwidth: Wide band FM: Approx. 180kHz

AM and SSB: Approx. 2.4kHz

BFO Frequency Range: ±1.5kHz

Reception Sensitivity: 0 to 6dBμV EMF with supplied antenna

Antenna Reception S/N Ratio: N-FM: 10 dB; W-FM: 12 dB

#### Display

Display Modes: Spectrum, Bar graph, Frequency counter

Spectrum Display: Displays 160 channels

Bar Graph Displays: Multi channel (2, 5, 10, 20, 40, 80, 160 bar graphs per display), Single Channel and 2 Channel difference

Sweep Modes: Single, Normal, Free run

Spurious Signals: (internally generated) -35dBc for W-FM

-45dBc for N-FM (typical below full scale signal level)

#### Scan Mode

Manual, Channel (memory scan) and Search scan

Scan Rate (3201): 12.5 Ch./Sec.

Scan Rate (3290): 125 Ch./Sec.

#### Memory

Data Memory: Stores 10 displays of up to 160 CH per display

Setup Memory: Stores 10 setups for each scan mode

#### Frequency Counter

Bandwidth (3201): 9MHz to 2060MHz

Bandwidth (3290): 9MHz to 2900MHz

Resolution: 1kHz

Accuracy: 50PPM ±1 count

Input Impedance: 50Ω

Max Input Volts: 5V RMS

Response Time: 0.512 Sec.

#### Input Sensitivity (3201):

9MHz to 2060MHz: 120mV

20MHz to 1500MHz: 50mV

2MHz to 2060MHz: 500mV

#### Input Sensitivity (3290):

9MHz to 2060MHz: 120mV

20MHz to 1500MHz: 50mV

2MHz to 2800MHz: 500mV

2800MHz to 2900MHz: 750mV

Data Memory: Stores 10 Readings

#### Miscellaneous

LCD: 192 x 192 Pixels, Light green

Back Light: LED. Back light will shut off 5 seconds after the last key depression

Interfaces: Std RS-232 interface with female 8 pin mini Din connector. Baud Rates of 1200, 2400, 4800 or 9600 BPS are menu selected. The software supplied is a Windows®-based program, which runs under Windows 95/98/ME/XP/2000.

Auto Power Off: 5, 10, 20 or 30 minutes after the last key depression—user selected.

Audio Output :120mW into a 8Ω Speaker

Power Requirements: (6) AA NiCd or Alkaline Batteries, 12 volt car adapter or 11V to 16V 500 mA Max AC to DC adapter

#### General Specifications

Operating Temperature: 0°C to 40°C

Relative Humidity: 35% to 85%

Storage Temperature: -10 to 50°C

Size: 9.5" H x 4.0" W x 1.8" D

Weight: 1.4 lbs

Supplied Accessories: Manual, (6) 1.5V AA NiCd Batteries, Detachable 9" whip antenna, RS-232 Cable, Carrying case, Earphone, Carrying strap and Software, Vehicle power adapter,